

ABSTRACT

A crystalline polymer exhibiting crystal transition in the solid phase state, which satisfies the relationship defined by the formula $150 > \Delta H_{tr} > 1.6T_{tr} - 3.5$ (1) (wherein ΔH_{tr} represents the endotherm (J/g) accompanying crystal transition and T_{tr} represents the crystal transition temperature ($^{\circ}\text{C}$)). This crystalline polymer has a weight average molecular weight of 600 thousand or less and a crystal transition temperature (T_{tr}) of 67°C or below. Since this crystalline polymer has a low phase transition temperature, a high heat of a crystal transition, and a high melting point, the potential utility thereof as a switching element or a thermal storage material used at around normal environment temperatures (20 to 50°C) is high.